

WHAT IS CLAIMED IS:

1. A human monoclonal antibody that binds to MCP-1 and comprises a heavy chain amino acid having a sequence selected from the group consisting of SEQ ID NOS: 2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58, 62, 66, 70, 74, 78, 82, 86, 90, 94, 98, 102, 106, 110, 114, 118, 122, 126, 130, 134, 138, 142 and 146.
2. The antibody of Claim 1, further comprising a light chain amino acid having a sequence selected from the group consisting of SEQ ID NOS: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144 and 148.
3. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:2 and the light chain amino acid comprises the sequence of SEQ ID NO:4.
4. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:6 and the light chain amino acid comprises the sequence of SEQ ID NO:8.
5. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:10 and the light chain amino acid comprises the sequence of SEQ ID NO:12.
6. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:14 and the light chain amino acid comprises the sequence of SEQ ID NO:16.
7. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:18 and the light chain amino acid comprises the sequence of SEQ ID NO:20.
8. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:22 and the light chain amino acid comprises the sequence of SEQ ID NO:24.
9. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:26 and the light chain amino acid comprises the sequence of SEQ ID NO:28.

10. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:30 and the light chain amino acid comprises the sequence of SEQ ID NO:32.

11. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:34 and the light chain amino acid comprises the sequence of SEQ ID NO:36.

12. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:38 and the light chain amino acid comprises the sequence of SEQ ID NO:40.

13. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:42 and the light chain amino acid comprises the sequence of SEQ ID NO:44.

14. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:46 and the light chain amino acid comprises the sequence of SEQ ID NO:48.

15. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:50 and the light chain amino acid comprises the sequence of SEQ ID NO:52.

16. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:54 and the light chain amino acid comprises the sequence of SEQ ID NO:56.

17. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:58 and the light chain amino acid comprises the sequence of SEQ ID NO:60.

18. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:62 and the light chain amino acid comprises the sequence of SEQ ID NO:64.

19. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:66 and the light chain amino acid comprises the sequence of SEQ ID NO:68.

20. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:70 and the light chain amino acid comprises the sequence of SEQ ID NO:72.

21. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:74 and the light chain amino acid comprises the sequence of SEQ ID NO:76.

22. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:78 and the light chain amino acid comprises the sequence of SEQ ID NO:80.

23. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:82 and the light chain amino acid comprises the sequence of SEQ ID NO:84.

24. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:86 and the light chain amino acid comprises the sequence of SEQ ID NO:88.

25. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:90 and the light chain amino acid comprises the sequence of SEQ ID NO:92.

26. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:94 and the light chain amino acid comprises the sequence of SEQ ID NO:96.

27. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:98 and the light chain amino acid comprises the sequence of SEQ ID NO:100.

28. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:102 and the light chain amino acid comprises the sequence of SEQ ID NO:104.

29. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:106 and the light chain amino acid comprises the sequence of SEQ ID NO:108.

30. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:110 and the light chain amino acid comprises the sequence of SEQ ID NO:112.

31. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:114 and the light chain amino acid comprises the sequence of SEQ ID NO:116.

32. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:116 and the light chain amino acid comprises the sequence of SEQ ID NO:118.

33. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:118 and the light chain amino acid comprises the sequence of SEQ ID NO:120.

34. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:122 and the light chain amino acid comprises the sequence of SEQ ID NO:124.

35. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:126 and the light chain amino acid comprises the sequence of SEQ ID NO:128.

36. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:130 and the light chain amino acid comprises the sequence of SEQ ID NO:132.

37. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:134 and the light chain amino acid comprises the sequence of SEQ ID NO:136.

38. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:138 and the light chain amino acid comprises the sequence of SEQ ID NO:140.

39. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:142 and the light chain amino acid comprises the sequence of SEQ ID NO:144.

40. The human monoclonal antibody of claim 2, wherein the heavy chain amino acid comprises the sequence of SEQ ID NO:146 and the light chain amino acid comprises the sequence of SEQ ID NO:148.

41. An antibody immobilized on an insoluble matrix, wherein the antibody is the antibody of Claim 2.

42. An improved method for assaying the level of monocyte chemo-attractant protein-1 (MCP-1) in a patient sample, wherein said improved method comprises the use of the anti-MCP-1 antibody of Claim 2 for detection of the level of MCP-1 in the assay of a patient sample.

43. A method according to Claim 42 wherein the patient sample is blood.

44. A composition, comprising the antibody or fragment thereof of Claim 2, and a pharmaceutically acceptable carrier.

45. A method of effectively treating a neoplastic disease, comprising:
selecting an animal in need of treatment for a neoplastic disease;
administering to said animal a therapeutically effective dose of a fully human monoclonal antibody that specifically binds to monocyte chemo-attractant protein-1 (MCP-1).

46. The method of claim 45, wherein said neoplastic disease is selected from the group consisting of: breast cancer, ovarian cancer, bladder cancer, lung cancer, glioblastoma, stomach cancer, endometrial cancer, kidney cancer, colon cancer, pancreatic cancer, and prostate cancer.

47. A method of effectively treating inflammatory conditions, comprising:
selecting an animal in need of treatment for an inflammatory condition;
administering to said animal a therapeutically effective dose of a fully human monoclonal antibody that specifically binds to monocyte chemo-attractant protein-1 (MCP-1).

48. The method of claim 47, wherein said inflammatory condition is selected from the group consisting of: rheumatoid arthritis, glomerulonephritis, atherosclerosis, psoriasis, restenosis, autoimmune disease, and multiple sclerosis.